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OFFICE OF MANNED SPACE FLIGHT
PROGRAM DIRECTIVE

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(Project)

DATE

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APOLLO PROGRAM DIRECTIVE NO. 18

TO : DISTRIBUTION

FROM:

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APOLLO PROGRAM DIRECTOR*John H. Fisher for*
ACTING DIRECTOR, SATURN/
APOLLO APPLICATIONS PROGRAMSUBJECT : Changes to Apollo Hardware and Software for Saturn/
Apollo Applications

- REFERENCES: 1) Apollo Program Directive No. 4 (Series), Apollo
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- Controlled Milestones and Hardware Quantities
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- 2) Apollo Configuration Management Manual, NPC 500-1

I. PURPOSE

This directive is to insure proper control of changes proposed to Apollo hardware and software (flight and ground equipment) as defined in Reference #1, to meet authorized requirements of the Saturn/Apollo Applications Program.

II. SCOPE AND APPLICABILITY

Certain hardware which is procured for the approved Apollo Program as defined in Reference #1, may eventually be reassigned to the Saturn/Apollo Applications Program. It is essential however, to control this hardware to insure the capability of using this hardware for Apollo missions. This directive applies to all Apollo and Saturn/Apollo Applications organizations, both NASA and contractors.

III. BASIC CHANGE CRITERIA

It is Apollo Program policy that changes made to Apollo hardware for Saturn/Apollo Applications requirements will be made at some point after delivery by the manufacturing contractor. In cases where it is considered more economical or necessary (due to long lead times etc.) to meet Saturn/Apollo Applications requirements, changes may be made in the manufacturer's plant prior to delivery, provided the following criteria are met:

- A. Changes must not preclude or compromise the use of the hardware for an Apollo mission unless such hardware is formally transferred from the Apollo to the Saturn/Apollo Applications Program.
- B. No change will be approved to Apollo hardware during the manufacturing cycle which will interfere with the contractor's capability to meet performance, cost, schedule or manpower requirements necessary to perform the lunar landing mission on the earliest possible date.

IV. ACTION REQUIRED

Apollo Program organizations will be responsible for approving and implementing changes to Apollo hardware to meet Saturn/Apollo Applications Program requirements. In addition the Apollo Program Office will be responsible for releasing hardware to the Saturn/Apollo Applications Program before any post-manufacturing changes are made. Changes to Apollo hardware will be controlled as follows:

- A. All changes proposed to be made to Apollo hardware for Saturn/Apollo Applications must be approved by the Apollo Program Office Level I Configuration Control Board.
- B. Proposed changes will be submitted through the appropriate Center (Apollo Program) Level II CCB.
- C. Changes will be submitted in the form of Engineering Change Proposals (ECP's), defining performance, schedule and cost impacts, and include the Level II CCB recommendation for approval or disapproval.
- D. Changes will be reviewed and approved or disapproved based on the criteria defined in paragraph III. When changes are approved, a Configuration Control Board Directive recording the action taken shall be forwarded to the appropriate Apollo Level II CCB for implementation.
- E. Center (Apollo Program) CCB's, in accordance with the procedures of Reference #2, will identify and provide a system for separate accounting of Apollo changes for Saturn/Apollo Applications.
- F. Center CCB's will insure that proper coordination of changes is accomplished between Apollo and Saturn/Apollo Applications Programs. In addition each MSF Center will establish procedures with their contractors to insure that the requirements of this directive are met.

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